

What Is Claimed Is:

1 1. A method of determining an appropriate refresh
2 interval for a DRAM chip, the method comprising:
3 detecting device startup;
4 providing a clock pulse as a refresh interval;
5 self-testing a plurality of memory cells using the refresh
6 interval;
7 modifying the refresh interval and repeating the above
8 steps;
9 determining the longest refresh interval as a result of the
10 self-testing procedure; and
11 using the appropriate refresh interval, defined by the
12 longest refresh interval, to refresh the DRAM.

1 2. The method of determining the appropriate refresh
2 interval as claimed in claim 1, wherein the self-testing
3 comprises:
4 writing an original test code to a plurality of DRAM memory
5 cells;
6 refresh the DRAM memory cells several times by using the
7 refresh clock;
8 comparing saved test code with the original test code, to
9 determine the effectiveness of the refresh interval;
10 if the result of the comparison is equal, the system outputs
11 a self-test success signal; and
12 if the result of the comparison is unequal, the system
13 outputs a self-test failure signal.

1 3. The method of finding the appropriate refresh
2 interval as claimed in claim 1, wherein the definition of the
3 most appropriate refresh interval comprises:
4 the most appropriate refresh interval is the longest
5 refresh interval plus a specific variable.